

AMENDMENTS TO THE CLAIMS:

Claim 1 (Previously Amended) A method of performing power amplification under variable envelope excitation, comprising the steps of:

converting an original input signal at least into a phase modulated signal part;
feeding at least the phase modulated signal part to an input port of an amplifier unit; and

amplifying said at least the phase modulated part of said original input signal by dynamically selecting a plurality of fixed power supply units for the amplifier unit, each fixed power supply unit having a different fixed output power, wherein the amplitude of the original input signal is recreated by the dynamic selection of the power supply units so as to change a further controllable input signal to the amplifier unit, in particular at least one of input power level, biasing voltage and biasing current, of the further controllable input signal supplied to a control input of the amplifier unit, during said step of amplifying.

Claim 2 (Previously Amended) The method of Claim 1, further characterized in that the dynamical selection of the fixed power supply unit(s) provides different fixed supply currents or supply voltages.

Claim 3 (Canceled)

Claim 4 (Previously Amended) The method of Claim 1, further comprising the step of compensating non-linearity by at least one of pre-distorting the power supply for the amplifier unit and pre-distorting the amplifier unit biasing voltage or biasing current at the control input.

Claim 5 (Previously Amended) The method of Claim 1, further comprising the step of lowpass filtering of a control signal for providing at least one of a changeable amplifier unit biasing voltage and a biasing current at the control input with a cut-off frequency close to a modulation bandwidth of the original input signal.

Claim 6 (Original) The method of Claim 1, further comprising the step of converting the original input signal into an amplitude modulated signal part, according to which the input power level is changed.

Claim 7 (Currently Amended) A power amplifier comprising:

- at least a final amplifier unit;
- means for feeding at least a phase modulated signal part of an original input signal to an input port of the final amplifier unit;
- at least two selectable power supply units with different fixed output powers connected to a supply port of the final amplifier unit;
- means for dynamically selecting a total supply power by selecting the respective power supply units; and
- means for controlling an input signal to the final amplifier circuit by ~~charging~~ changing the selected supply power units, in particular at least one of input power level ~~and~~, biasing voltage or and biasing current.

Claim 8 (Previously Amended) The power amplifier of Claim 7, wherein each of the power supply units either comprises a DC/DC converter or is connected to the supply port in parallel or is selected by a common digital signal processor.

Claim 9 (Previously Amended) The power amplifier of Claim 7, wherein a linear regulator is used to control at least one of biasing voltage and biasing current at the input to the amplifier, and wherein a control path includes a lowpass filter for controlling the biasing voltage or biasing current.

Serial No. 10/601491

Claim 10 (Canceled)